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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,973	03/31/2004	Frank Dumont	PA030012	5919

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EXAMINER	
TRAN, TRANG U	

ART UNIT	PAPER NUMBER
2622	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/813,973	DUMONT ET AL.	
	Examiner	Art Unit	
	Trang U. Tran	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *April 05, 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 05, 2010 has been entered.

Response to Arguments

2. Applicant's arguments filed April 05, 2010 have been fully considered but they are not persuasive.

In re pages 5-7, applicants argue, with respect to claim 16, that none of Oya, Perlman, or Krishnamurthy, alone or in combination, discloses a video apparatus having the claimed limitation "wherein the processing means includes a compression encoder having an adjustable encoding bit-rate and wherein the control means includes means for adjusting the encoding bit rate based on the indicator" because Oya receives a digital television signal (either terrestrial digital television or CATV digital, not an analog signal and the term "adjustable encoding bit-rate" in the present claims refers not to differences in the bit-size of separate frames, but instead to the overall bit-rate of the compressed video stream, which can be adjusted.

In response, the examiner respectfully disagrees. It is noted that Oya discloses an apparatus for receiving either terrestrial digital television or CATV digital; however,

Oya also discloses "ADC 15". The ADC 15 shows analog video signal. As discussed in the last Office Action, Perlman discloses in page 4, paragraph #0040 that ". .... and the compression module 906 for compressing the signal before storing it to the mass storage device 460" and in page 5, paragraph #0055 that "As illustrated in FIG. 13, an MPEG-2 stream 1310 is comprised of a series of I-frames separated by B-frames and P-frames. MPEG-2 uses similar DCT-based intraframe coding as the JPEG standard for each of the I-frame, but compresses the intervening video content by encoding only the differences between periodic I-frames within the B- frame and P-frames. Accordingly, it would be preferable if the pointers 1201-1204 contained in the timestamp index 1200 pointed to I-frames within the MPEG-2 stream rather than B or P frames (i.e. because the B and P frames are meaningless outside of the context of the two I-frames they connect). Accordingly, if the timestamp index is generated by the organization providing the source material, each of the pointers 1201- 1204 should be selected to point to I-frames within the MPEG-2 stream". From the above passages, it is clear the compression module 906 of Perlman is the compression encoder having an adjustable encoding bit-rate (the difference in the B-frames and P- frames) and the bit-rate is based on the indicator (the output of the I-frames, B-frames, and P-frames is based on the differences in the B-frames and P-frames and the whole frame of the I-frames or is based on the IDs of the I-frames, B-frames, and P-frames. Thus, Perlman alone discloses the claimed "wherein the processing means includes a compression encoder having an adjustable encoding bit-rate and wherein the control means includes means for adjusting the encoding bit rate based on the indicator". Additionally, Krishnamurthy

et al discloses the bits conversion in columns 3-5. The bits conversion of Krishnamurthy et al also anticipates the claimed "wherein the processing means includes a compression encoder having an adjustable encoding bit-rate and wherein the control means includes means for adjusting the encoding bit rate based on the indicator".

In re pages 8-10, applicants argues, with respect to claim 1, that none of Oya, Perlman, Van Der Wijst, or Ruitenberg, alone or in combination, discloses a video apparatus: "wherein the processing means for receiving the analog video signal and outputting a compression encoded stream based on the video signal includes an adjustable filter and wherein the control means includes means for adjusting the adjustable filter based on the indicator".

In response, the examiner respectfully disagrees. As discussed above with respect to claim 16, Perlman teaches the claimed compressing analog video signal to output a compression encoded stream based on the video signal. As discussed in the last Office Action, both Van Der Wijst and Ruitenberg teach adjustable SAW filter the SAW filters of Van Der Wijst and Ruitenberg are responsive to indicator. The combination of Perlman, Van Der Wijst, and Ruitenberg does indeed disclose the claimed "wherein the processing means for receiving the analog video signal and outputting a compression encoded stream based on the video signal includes an

In re page 11, applicants state that dependent claims 3-4, 5, 6-10 and 11-15 are dependent from independent claims 1 and 16, which is allowable for the reasons described above, it is submitted that they too are allowable for at least the same reasons that claims 1 and 16 are allowable.

In response, as discussed above with respect to claims 1 and 16, the proposed combination of references discloses all the claimed limitations of independent claims 1 and 16.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section discloses all the claimed subject matter, note 1) the claimed of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oya (US Patent No. 6,421,098 B1) in view of Perlman et al (US Pub 2007/0147406 A1) and further in view of Krishnamurthy et al. (US Patent No. 5,508,748).

In considering claim 16, Oya discloses all the claimed subject matter, note 1) the claimed a receiver for converting an RF signal into a video signal is met by the digital television signal receiver (Fig. 3, col. 3, line 62 to col. 4, line 50), 2) the claimed processing means receiving the video signal and outputting an encoded stream based on the video signal is met by the digital demodulator 16 (Fig. 3, col. 4, lines 9-50), 3) the claimed an indicator of a characteristic of the RF signal is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50), and 4) the claimed control means for adjusting the processing means based in the indicator is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32).

However, Oya explicitly does not specifically disclose that the processing means receives the video signal and outputs a compression encoded stream and the newly added limitation wherein the processing means includes a compression encoder having an adjustable encoding bit-rate and wherein the control means includes means for adjusting the encoding bit-rate based on the indicator.

Perlman et al teach that a television receiver having compression module for compressing the signal before storing it to the mass storage device (Fig. 9, element 906, page 4, paragraph #0044).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the compression module as taught by Perlman et al into Oya's system in order to reduce the bandwidth of the video signal to be transmitted, to reduce time in transmitting the video signal, or increase the storage capacity when storing the video signal into memory.

The combination of Oya and Perlman above does not specifically disclose the newly added limitation wherein the processing means includes a compression encoder having an adjustable encoding bit-rate and wherein the control means includes means for adjusting the encoding bit-rate based on the indicator.

Krishnamurthy et al teach that the offset 10-bits symbols are then applied through frame formatter 15 to D/A converter 16 where they are converted to analog form for transmission by VSB transmitter 17, also, it will be observed that the data rate characterizing each VSB mode increases by one bit per symbol relative to the data rate

of the immediately lower VSB mode while its S/N ratio performance is reduced by one-half (col. 3, col. 4, line 7 to col. 5, line 55).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the encoded bit-rate as taught by Krishnamurthy et al into Oya's system in order to provide a simplified level selection system for transmission and reception of a digital information signal having a variable data constellation.

5. Claims 1, 3-4, and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oya (US Patent No. 6,421,098 B1) in view of Perlman et al (US Pub 2007/0147406 A1) and further in view of Van Der Wijst et al (US Patent No. 7,006,150 B2) or Ruitenburg (US Patent No. 6,252,633 B1).

In considering claim 1, Oya discloses all the claimed subject matter, note 1) the claimed a receiver for converting an analog RF signal into a video signal is met by the digital television signal receiver (Fig. 3, col. 3, line 62 to col. 4, line 50), 2) the claimed processing means receiving the analog video signal and outputting an encoded stream based on the video signal is met by the digital demodulator 16 (Fig. 3, col. 4, lines 9-50), 3) the claimed an indicator of a characteristic of the analog RF signal is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50), and 4) the claimed control means for adjusting the processing means based in the indicator is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32).

However, Oya does not specifically disclose the newly added limitation that the processing means receives the video signal and outputs a compression encoded

stream and the newly added limitation wherein the processing means for receiving the analog video signal and outputting a compression encoded stream based on the video signal includes an adjustable filter and wherein the control means includes means for adjusting the adjustable filter based on the indicator.

Perlman et al teaches that a television receiver having compression module for compressing the signal before storing it to the mass storage device (Fig. 9, element 906, page 4, paragraph #0044).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the compression module as taught by Perlman et al into Oya's system in order to reduce the bandwidth of the video signal to be transmitted, to reduce time in transmitting the video signal, or increase the storage capacity when storing the video signal into memory.

The combination of Oya and Perlman above does not specifically disclose the newly added limitation wherein the processing means for receiving the analog video signal and outputting a compression encoded stream based on the video signal includes an adjustable filter and wherein the control means includes means for adjusting the adjustable filter based on the indicator.

Both Van Der Wijst et al and Ruitenburg teaches that the SAW filter is adjusted to improve the performance of the signal processing (see Van Der Wijst et al, col. 2, lines 42-51 and Ruitenburg, col. 2, lines 44-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to the adjustable SAW filter taught by Van Der Wijst et al or Ruitenburg into Oya's system in order to increase the quality of the video signal to be displayed.

In considering claim 3, the claimed wherein the receiver outputs the video signal as an analogue signal and wherein a video decoder converts the analogue signal into a digital stream is met by the digital demodulator 16 (Fig. 3, col. 4, lines 9-50 of Oya).

In considering claim 4, the claimed wherein the video decoder comprises the adjustable filter is met by the digital demodulator 16 (Fig. 3, col. 4, lines 9-50 of Oya).

In considering claim 6, the claimed wherein the characteristic is the amplitude of the RF signal is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32 of Oya).

In considering claim 7, the claimed wherein the indicator is a voltage controlling the gain of an amplifier of the receiver is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50 of Oya).

In considering claim 8, the claimed wherein the receiver comprises a tuner which outputs an IF signal and wherein the indicator is the amplitude of the IF signal is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50 of Oya).

In considering claim 9, the claimed wherein the control means comprises a micro-processor is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32 of Oya).

In considering claim 10, the claimed wherein the micro-processor has means for receiving a signal representative of the indicator and means for sending control data to adjust the processing means is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32 of Oya).

6. Claims 5 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oya (US Patent No. 6,421,098 B1) in view of Perlman et al (US Pub 2007/0147406 A1) further in view of Van Der Wijst et al (US Patent No. 7,006,150 B2) or Ruitenburg (US Patent No. 6,252,633 B1) as applied to claims 1, 3-4 and 6-10 above, and further in view of Krishnamurthy et al. (US Patent No. 5,508,748).

In considering claim 5, the proposed combination of Oya, Perlman et al and (Van Der Wijst et al or Ruitenburg) discloses all the limitations of the instant inventions as discussed in claim 1 above, except for providing the claimed wherein the processing means includes an encoder having an adjustable encoding bit-rate and wherein the control means includes means for adjusting the encoding bit-rate based on the indicator.

Krishnamurthy et al teach that the offset 10-bits symbols are then applied through frame formatter 15 to D/A converter 16 where they are converted to analog form for transmission by VSB transmitter 17, also, it will be observed that the data rate characterizing each VSB mode increases by one bit per symbol relative to the data rate of the immediately lower VSB mode while its S/N ratio performance is reduced by one-half (col. 3, col. 4, line 7 to col. 5, line 55).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the encoded bit-rate as taught by Krishnamurthy et al into the proposed combination of Oya, Perlman et al and (Van Der Wijst et al or Ruitenburg)'s system in order to provide a simplified level selection system for transmission and reception of a digital information signal having a variable data constellation.

In considering claim 11, the claimed wherein the characteristic is the amplitude of the RF signal is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32 of Oya).

In considering claim 12, the claimed wherein the indicator is a voltage controlling the gain of an amplifier of the receiver is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50 of Oya).

In considering claim 13, the claimed wherein the receiver comprises a tuner which outputs an IF signal and wherein the indicator is the amplitude of the IF signal is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50 of Oya).

In considering claim 14, the claimed wherein the control means comprises a micro-processor is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32 of Oya).

In considering claim 15, the claimed wherein the micro-processor has means for receiving a signal representative of the indicator and means for sending control data to

adjust the processing means is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32 of Oya).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 9:00 AM - 6:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 24, 2010

/Trang U. Tran/
Primary Examiner, Art Unit 2622